



## Buck Branch Project—Tellico Ranger District

In April of 2016 the USDA Forest Service and the Tennessee Wildlife Resources Agency entered into a *Good Neighbor Authority (GNA)* master agreement to help conserve, protect and manage natural resources in the Cherokee National Forest. The agreement provides the ability to work across jurisdictional boundaries and treat the landscape in a mixed federal/state ownership setting. Projects that can be accomplished under the agreement include watershed restoration and protection, forest health thinning, prescribed fire, forest planning, wildlife management and timber harvesting preparation.



In early 2017 the Buck Branch GNA project, located in the Tellico Ranger District, began. The intent was to reduce the wildfire hazard, enhance forest health and improve wildlife habitat. The project was designed in two phases. As part of phase one, 1,159 acres were prescribed burned in the Buck Branch and Turkey Creek areas. The prescribed burn accomplished exactly what it was intended to do: 1) Reduce accumulations of forest fuels such as leaves, brush, downed trees, and pine needles that create a fire hazard; 2) Reduce certain types of vegetation that compete for light, moisture, and nutrients. It also reduced the leaf litter on the forest floor which often prevents seed germination for natural reproduction of desirable vegetation, including native grasses; 3) Promote new sprout and herbaceous growth that serves as beneficial food and cover for many animals.

Phase 2 of the project focused on daylighting along roads, creating linear wildlife openings. This involved removing selected trees from the canopy that increased the amount of sunlight that can reach the ground which in turn stimulates the growth of desirable native grasses and forbs. Daylighting was done within 25' of each side of roads.



### *GNA at work on the ground.*



Through the Good Neighbor Authority agreement a combination of dedicated volunteers, USDA Forest Service and Tennessee Wildlife Resources Agency (TWRA) personnel accomplished the work. The Forest Service utilized Tellico District employees and members of the Cherokee Interagency Hotshot Crew on both phases of the project. Volunteers from the National Wild Turkey Federation (NWTf) provided tremendous support to the project. The TWRA had the ability, through the Pittman-Robertson Act, to match NWTf contributions and volunteer hours. This made it possible for TWRA to purchase needed equipment and supplies that can be used for the South Cherokee Wildlife Management Area, which includes the Cherokee National Forest.

# Cherokee National Forest

## Buck Branch Good Neighbor Authority Project Facts

**Prescribed Fire**—Buck Branch is within a 1,159 acre prescribed (RX) burn unit. The area includes tree mortality from a southern pine beetle infestation. RX fire was used to reduce buildup of combustible fuels (heavy vegetation that can fuel wildfires) and to open this area up to encourage the growth of desirable native grasses and forbs— while providing wildlife habitat and nesting areas, and eliminating unwanted tree species that crowd and compete with desirable species.

**Daylighting**—This forest management tool removes selected trees from the canopy which increases the amount of sunlight that can reach the ground which in turn stimulates the growth of desirable native grasses and forbs. Daylighting was done within 25' of both sides of the Buck Branch Road and then additional edge-feathering was accomplished for another 50'-75'. The increase in grasses and forbs is providing an important habitat component for various wildlife species including pollinators, migratory birds, insect production for bat forage, and various game species. The linear nature of these areas provides habitat connectivity which spreads the benefit over a much larger land area.

**Native Plant Species and Non Native Invasive Species**—The Buck Branch project is benefiting the growth of a variety of desirable native grasses and forbs. The application of prescribed fire greatly stimulated the reappearance of several native species. Various Southern Appalachian Ecotype grasses and forbs were applied to the area. There are a number of non-native invasive plant species present in the area that were treated with herbicide to remove them from competing with native species. An ephemeral pool was also created at the end of the road for wildlife including bats and amphibians.



*Through the Good Neighbor Authority agreement a combination of dedicated volunteers and USDA Forest Service and Tennessee Wildlife Resources Agency personnel accomplished this worthwhile public land work.*

